## **FUROPEAN PATENT OFFICE**

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INVENTOR: TADA YOSHIAKI:

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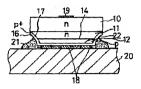
APPLICANT: SANKEN ELECTRIC CO LTD:

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TITLE

 SEMICONDUCTOR LIGHT EMITTING FLEMENT AND ITS MANUFACTURE



ABSTRACT: PURPOSE: To prevent solder from attaching by moving a p-n junction part exposed in a mesa etching side surface of a GaP light emitting diode.

> CONSTITUTION: A wafer is prepared by forming an n-type first semiconductor region 11 and a p-type second semiconductor region 12 on an n-type semiconductor substrate 10 by an epitaxial growth method. A groove is formed along a division predetermined region of a surface at the side of the second semiconductor region 12 of the wafer. Then, p-type impurities are diffused to include the groove. After an anode electrode 18 and a cathode electrode 19 are formed, a light emitting diode is acquired by cutting by the groove. It is then adhered to a metal substrate 20 by solder 21 with the anode electrode 18 down.

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